

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
QUALCOMM Incorporated)	WT Docket No. 05-7
)	
Petition for Declaratory Ruling that OET-69 is)	
Acceptable to Demonstrate Compliance with)	
Section 27.60)	

COMMENTS OF MOTOROLA, INC.

Motorola, Inc. (“Motorola”) hereby submits these comments in response to Qualcomm Incorporated’s (“Qualcomm”) Petition for Declaratory Ruling seeking clarification of certain rules and the establishment of a streamlined review process for compliance with Section 27.60 of the Commission’s rules.¹ Specifically, Qualcomm requests that the Commission clarify that the procedures contained in the Office of Engineering and Technology Bulletin No. 69 (“OET-69”) are an acceptable method for demonstrating compliance with the interference protection criteria set forth in Section 27.60.² Qualcomm also asks the Commission to establish that a two percent *de minimis* level of interference is acceptable.³ Finally, Qualcomm urges the Commission to streamline the processing of OET-69 showings by instituting a shortened public notice period and presuming that these showings are in the public interest.⁴

¹ QUALCOMM Incorporated, Petition for Declaratory Ruling that OET-69 is Acceptable to Demonstrate Compliance with Section 27.60, WT Docket No. 05-7 (filed Jan. 10, 2005) (“Petition”).

² *Id.* at 11-17.

³ *Id.* at 18-22.

⁴ *Id.* at 22-25.

Motorola has been an active participant in all FCC proceedings designed to make 700 MHz spectrum available for public safety and commercial uses. In addition, Motorola is the licensee of 700 MHz Guard Band license WPRR297 and therefore has a direct interest in policies and rules that affect the ability of 700 MHz licensees to deploy stations during the DTV transition. In general, Motorola strongly supports the establishment of FCC policies and rules that promote the expanded use of 700 MHz spectrum prior to the termination of the DTV transition.

Qualcomm's Petition principally addresses Section 27.60 of the Commission's rules, which provides interference protection criteria to incumbent TV/DTV stations from commercial 700 MHz licensees.⁵ A commercial 700 MHz licensee can show compliance with the protection criteria by one of the following methods: 1) abide by the minimum geographic separation requirements between its transmitting facilities and the affected broadcast stations as contained in the tables provided in Section 90.309 of the Commission's rules, 2) for facilities beyond those contemplated by the tables in Section 90.309, calculate geographic separation in accordance with desired signal to undesired signal ratios, 3) submit engineering studies to justify proposed separations based on the "actual" parameters of the 700 MHz licensees, or 4) provide written concurrence of the affected TV/DTV station.⁶

Currently, 700 MHz licensees are uncertain as to what is required to comply with Section 27.60 of the Commission's rules. Indeed, some carriers have sought (and received) waivers from the Commission when submitting an engineering report based on actual parameters to demonstrate sufficient separation to prevent harmful interference even though subsection (iii) of

⁵ Similarly, Section 90.545 details the TV/DTV interference protection criteria for 700 MHz public safety licensees. 47 C.F.R. § 90.545.

⁶ 47 C.F.R. § 27.60.

this Section specifically provides for the submission of engineering reports precisely for this purpose.⁷ This lack of clarity is delaying licensees' deployment of new and innovative services using this spectrum. Clarifying the Commission's process and intent will facilitate the full utilization of this spectrum throughout the DTV transition while also protecting incumbent broadcasters from harmful interference.

The procedures set forth in OET-69 are an effective method for calculating the impact interference may have on co-channel and adjacent channel TV and DTV stations. OET-69 utilizes the actual parameters, such as intervening terrain and engineering techniques, of the proposed Part 27 station and the incumbent TV station to determine the level of interference that will be experienced by the broadcast licensee.⁸ In contrast, the Commission's standard spacing and protection requirements for land mobile protection to television broadcast stations are based on average parameters. Accordingly, this allows for more accurate interference predictions than the other methods permitted by Section 27.60 of the Commission's rules.

Moreover, both the broadcast industry and the Commission have regularly used this methodology to determine interference levels. For example, the broadcast industry and the Commission have used this standard in analyzing DTV applications and modifying the DTV Table of Allotments.⁹ The Commission has also recently reaffirmed the effectiveness of this standard in the digital LPTV proceeding.¹⁰ There is no reason to believe that this standard will

⁷ See, e.g., Access Spectrum, LLC Request for Waiver of Section 27.60, Memorandum Opinion and Order, 19 FCC Rcd 15545 (2004) ("ASL Order"). See also, Aloha Partners, L.P. Request for Waiver of Section 27.60, FCC File No. 0001777981, rel. Feb. 18, 2005 ("Aloha Order").

⁸ See Office of Engineering and Technology Releases Update of OET Bulletin No. 69, Public Notice, 19 FCC Rcd 2208 (2004).

⁹ 47 C.F.R. §§ 73.622, 73.623.

¹⁰ Amendment of Parts 73 and 74 of the Commission's Rules to Establish Rules for Digital

not be equally effective in analyzing interference caused to TV/DTV stations by land mobile operations. Thus, the Commission should clarify that OET-69 is a sufficient mechanism for demonstrating compliance with Section 27.60 of the Commission's rules.¹¹

Similarly, the Commission should clarify that compliance with the results of the Stanks Report is sufficient to demonstrate compliance with Section 27.60 of the Commission's rules. This report was intended to develop a base of data that could "be used in making decisions when questions arise concerning the sharing of frequencies between the Television Broadcast and the Land Mobile Radio Services."¹² This report found that the susceptibility of UHF television receivers decreases significantly as the frequency separation between the proposed land mobile operation and the UHF receiver increases.¹³ Land mobile licensees should therefore be permitted to calculate the required separation from incumbent TV/DTV stations based upon the data gathered for the Stanks Report.

In clarifying that submission of an OET-69 engineering report is sufficient to comply with Section 27.60, the Commission should also establish a *de minimis* level of acceptable interference as urged by Qualcomm.¹⁴ The allowance of a *de minimis* level of interference is essential to the timely deployment of new wireless services in the 700 MHz band, as anticipated

(Continued . . .)

Low Power Television, Television Translator, and Television Booster Stations and to Amend Rules for Digital Class A Television Stations, Report and Order, 19 FCC Rcd 19331 (2004).

¹¹ It is worth noting that in its analysis of the interference potential posed by the short-spacing waiver sought by Aloha Partners, the FCC's Wireless Telecommunications Bureau performed its own interference analysis relying on the radio propagation prediction methods that are part of OET-69. *See* Aloha Order at 7, 8.

¹² Receiver Susceptibility Measurements Relating to Interference Between UHF Television and Land Mobile Radio Services, FCC/OET TM87-1, 2 (Apr. 1986) ("Stanks Report").

¹³ *Id.*

¹⁴ Petition at 18-22.

by Congress. This *de minimis* standard will allow co-primary 700 MHz wireless licensees to begin to deploy services over this spectrum, without substantially interfering with incumbent broadcasters. The clearing of the 700 MHz band to allow for public safety and advanced wireless services is a critical goal of the digital transition. These services, however, will not be readily available once the band is clear if licensees are not permitted to begin operating prior to the end of the transition. As the Commission found when permitting a *de minimis* level of interference resulting from new DTV stations,¹⁵ the establishment of a *de minimis* level of interference will promote the digital transition by encouraging the rapid deployment of advanced wireless services in the 700 MHz band even prior to the end of the digital transition.

Finally, as Qualcomm proposes, the Commission should establish streamlined processing procedures, such as a shortened public notice period and a rebuttable presumption of compliance, for OET-69 showings.¹⁶ By doing so, the Commission will facilitate the deployment of new services on this spectrum thereby maximizing the use of this spectrum and furthering the digital transition. Indeed, the Commission did precisely this with the upper 700 MHz band. In that band, the Commission found that voluntary clearing arrangements were presumably in the public interest if new wireless services would be made available to consumers and local communities would not lose their main/sole broadcast service.¹⁷ Here, these same prerequisites are present: (1) new wireless services will be made available to consumers and (2) broadcasters would experience only minimal interference, which would not result in substantial loss of service to

¹⁵ Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order, 13 FCC Rcd 7418 (1998).

¹⁶ Petition at 22-25.

¹⁷ Service Rules for the 746-764 and 776-794 MHz Bands and Revisions to Part 27 of the Commission's Rules, Memorandum Opinion and Order, 15 FCC Rcd 20845 (2000).

consumers. Accordingly, a rebuttable presumption that OET-69 showings are in compliance with Section 27.60 of the Commission's rules is in the public interest.

For these reasons, Motorola urges the Commission to grant Qualcomm's Petition for Declaratory Ruling.

Respectfully submitted,

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